

CLAIMS

1. An automated method for recording sites accessed by a client in a communications network, the method including the steps of:

detecting submission of a search query from the client to one or more
5 search engines; and

recording a search trail of one or more parameters of sites accessed
consecutively following return of search query results to the client.

2. An automated method according to claim 1, wherein the step of
detecting submission of the search query includes:

10 detecting submission of a completed form object from the client;

determining if part of the form object matches a known search command
format of any of the plurality of search engines.

3. An automated method according to claim 2, wherein the search
command format includes the network address of a search engine program for
15 executing the search query.

4. An automated method according to claim 3, wherein the search
command format further includes one or more search parameters identifying a
user-entered search query.

5. An automated method according to any one of claims 2 to 4, wherein
20 the step of detecting submission of a completed form object by the client includes:

locating form objects in an object model of content served to a client; and

adding a routine to each form object to enable interception of the completed
form object upon submission.

6. An automated method according to claim 5, wherein the step of locating all form objects in a document object model of content served to a client is carried out after the content has been served to the client.

7. An automated method according to claim 6, wherein the content is
5 an HTML document, and all form objects in a document object model of the HTML document are located once a DocumentComplete event occurs.

8. An automated method according to claim 7, wherein the HMTL document includes a GET or a POST form.

9. An automated method according to any one of the preceding claims,
10 wherein the step of recording one or more parameters of the sites accessed consecutively from the search query results is optionally selectable at the client once a search query is detected.

10. An automated method according to any one of the preceding claims,
wherein the step of recording one or more parameters of the sites accessed
15 consecutively from the search query results includes:

recording the network address of the consecutively accessed sites.

11. An automated method according to claim 10, wherein the step of recording one or more parameters of the sites accessed consecutively from the search query results further includes:

20 recording one or more of a user identifier, the network address of a referring site, the network address of the client and search term or terms entered by the user at the client.

12. An automated method according to either one of claims 10 or 11,
wherein the step of recording one or more parameters of the sites accessed
25 consecutively from the search query results further includes:

transmitting the one or more parameters identified at the client to a trail recorder server for recordal.

13. An automated method according to claim 12, and further including:

initially recording the one or more parameters in a RAM table at the trail recorder server.

14. An automated method according to claim 13, and further including:

5 periodically saving RAM table data to disk-based tables at the trail recorder server.

15. An automated method according to claim 14, wherein a first disk-based table stores data characterising each search trail.

16. An automated method according to either one of claims 14 or 15,
10 wherein a second disk-based table stores data characterising the consecutive sites accessed in each search trail.

17. An automated method according any one of the preceding claims, wherein the number of consecutively accessed sites is limited to a predetermined maximum.

15 18. An automated method according to any one of the preceding claims, and further including:

maintaining an adapter table of known search command formats for the plurality of search engines.

19. An automated method according to claim 18, and further including:

20 periodically validating the search command formats maintained in the adapter table.

20. An automated method according to either one of claims 18 or 19, and further including:

automatically identifying a search command format of a new search engine;
and

updating the adapter table.

21. An automated method according to any one of claims 18 to 20, and
5 further including:

collecting search information identifying a search box page of a search
engine; and

identifying the search command format from the search information.

22. An automated method according to claim 21, wherein the step of
10 collecting search information includes:

collecting the HTML code of the search box; and

parsing the HTML code to identify the search command format.

23. An automated method according to any one of claims 9 to 17, and
further including:

15 matching the search query to previous search queries to identify related
search trails.

24. An automated method according to claims 23, wherein the step of
matching the search query to previous search queries includes:

conducting a full text search on the search query and previous search
20 queries.

25. An automated method according to either one of claims 23 or 24,
wherein the step of matching the search query to previous search queries
includes:

limiting the related search trails to search trails resulting from search queries from a same user.

26. An automated method according to either one of claims 23 or 24, wherein the related search trails include search trails resulting from search queries
5 from a same user and other users.

27 An automated method according to any one of claims 23 to 26, and further including:

presenting the related search trails at the client.

28. An automated method according to claim 27, wherein the step of
10 presenting the related search trails includes:

ordering the related search results by one or more ranking criteria.

29. An automated method according to claim 28, wherein the ranking criteria include any one or more of date, inverse document frequency match, target search engine, user identifier, or trail weight indicative of the cumulative
15 frequency of user visits to steps in a related search trail.

30. An automated method according to any one of the preceding claims, wherein the communications network is the Internet, an intranet, an extranet or other network running client/server applications.

31. An automated method according to any one of the preceding claims,
20 wherein the one or more search engines are maintained on the client.

32. A system for recording sites accessed by a client in a communications network, the system including:

a search query detector for detecting submission of a search query from the client to one of a plurality of search engines; and

a search trail recorder for recording a search trail of one or more parameters of sites accessed consecutively following return of search query results to the client.

33. A system according to claim 32, and further include:

5 an adapter manager for maintaining an adapter table of known search command formats for the plurality of search engines.

34. A system according to either one of claims 32 or 33, and further including:

a trail searcher for matching the search query to previous search queries to
10 identify related search trails.

35. A system according to any one of claims 32 to 34, wherein the search query detector is a toolbar, browser addon or extension, deskbar, agent, proxy or like client-side application.

36. A search query detector for use with a system according to any one
15 of claims 32 to 34.

37. A search trail recorder for use with a system according to any one of claims 32 to 34.

38. An adapter manger for use with a system according to claim 33.

39. A trail searcher for use with a system according to claim 34.

20 40. Computer software including program instructions for carrying out the method performed by the search query detector, search trail recorder, adapter manager and/or trail searcher according to any one of claims 32 to 39.